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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,237	07/31/2003	Nandakumar Vaidyanathan	PTK-226	2540
51414	7590	08/18/2005	EXAMINER	
			NGUYEN, JOHN QUOC	
		ART UNIT		PAPER NUMBER
		3654		

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/632,237	VAIDYANATHAN ET AL.	
	<b>Examiner</b> John Q. Nguyen	<b>Art Unit</b> 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 June 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 11-14 is/are allowed.  
 6) Claim(s) 1-10, 15-24 is/are rejected.  
 7) Claim(s) 25-27 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear how rotation of the cylinder can adjust the force applied by the web against the surface of the cylinder.

Claims 1, 6, 19, 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Said subject matter is "exposed sensors".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-5, 7, 15, 19-25 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For clarity and/or definiteness, it appears that "of a" (claim 19, line 3) should be --of the--, that "by a" (claim 23, line 6, claim 25, line 5) should be --by the--.

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Claims 2-5, 7, 20-22, 24 recites the limitation "the at least one sensor". There is insufficient antecedent basis for this limitation in the claim.

Claims 15 recites the limitation "the web supply spool and the web-uptake spool". There is insufficient antecedent basis for this limitation in the claim.

All claims should be revised carefully to correct all other deficiencies similar to the ones noted above.

Claims 1, 2, 5, 19, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Mucke et al (US-5629487). Mucke et al discloses a plurality of sensors/sensor assemblies (each comprising elements 1 and 3) within the circumferential surface of cylinder 4 for measuring the force applied by the web 8. Since element 3 is integral with the sensor 1 and moves integrally with the sensor 1, it is deemed to be part of the sensor assembly or "sensor", each sensor assembly/sensor comprising elements 1 and 3.

Claims 3, 4, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mucke et al.(US-5629487).

The alternative use of a force-sensitive resistor or load cell as the sensor in Mucke et al in lieu of the piezo-electric type of sensor would have been obvious consideration to a person having ordinary skill in the art since such sensors are old and well known in the sensor art, as previously noted.

Claims 1-10, 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mucke et al (US-5629487) in view of Lee (US-5553801) or Lee in view of Mucke et al.

Mucke et al discloses a plurality of sensors 1 within the circumferential surface of cylinder 4 for measuring the force applied by the web 8. The measurements are then used to control an operation of the apparatus. Lee discloses another similar apparatus with a sensor 20 on a cylinder 30 to measure the force applied by the web. The measurements are then used as input to a servo controller to control a tensioning device (tension pole) or reel drive clutch of the running mechanism. The alternative use of a force-sensitive resistor or load cell as the sensor in lieu of the piezo-electric type of sensor would have been obvious consideration to a person having ordinary skill in the art since such sensors are old and well known in the sensor art, as previously noted. It would have been obvious to a person having ordinary skill in the art to provide the apparatus of Mucke et al with means to adjust the force applied by the web (control tension) as taught by Lee. Alternatively, it would have been obvious to a person having ordinary skill in the art to provide the apparatus of Lee with a roller and plurality of sensors as taught by Mucke et al to obtain a more accurate measurement of force across the web width. That the set value comprises a range would have been an obvious matter of design choice to a person having ordinary skill in the art based on factors such as preference and design/operational criteria. To adjust the rotation of one of the supply or uptake spool to adjust tension/force (such as braking the supply spool to increase tension) is old and well known in the art and Official notice is hereby taken

of such; therefore, to adjust spool rotation to adjust tension would have been obvious to a person having ordinary skill in the art.

Claims 6-10, 15, 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis (US-6325322) in view of Mucke et al (US-5629487) and Lee (US-5553801).

Lewis discloses a tension control system in a cylinder having a cavity that accommodates the supply and take-up spools, Fig. 4, as well as prior art system in which the cylinder accommodates the supply and take-up spools in separate cavities, Fig. 3. Mucke et al and Lee have been advanced above. It would have been obvious to a person having ordinary skill in the art to provide the apparatus of Lewis with sensors as taught by Mucke et al to more accurately measure the tension in the web and with means to adjust the force applied by the web (control tension) as taught by Lee. The alternative use of a force-sensitive resistor or load cell as the sensor in lieu of the piezo-electric type of sensor would have been obvious consideration to a person having ordinary skill in the art since such sensors are old and well known in the sensor art, as previously noted.

Claims 25-27 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 11-14 are allowed.

Applicant's arguments filed 6/7/05 have been fully considered but they are not persuasive.

As noted above, since element 3 is integral with the sensor 1 and moves integrally with the sensor 1, it is deemed to be part of the sensor assembly or "sensor", each sensor assembly/sensor comprising elements 1 and 3.

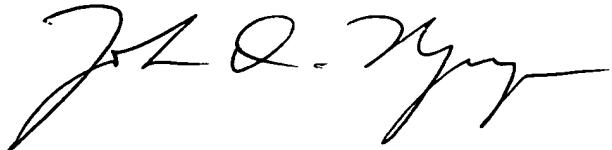
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Q. Nguyen whose telephone number is (571) 272-6952. The examiner can normally be reached on Monday, Tuesday, Thursday, and Friday, from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Matecki, can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John Q. Nguyen  
Primary Examiner  
Art Unit 3654